

Validation report

DAS-ELISA GLRaV-4 strain 6

Article No.: 122478 (GLRaV-4 strain 6 Complete kit 96) / 122476 (GLRaV-4 strain 6 Complete kit 480) / 122473 (GLRaV-4 strain 6 Complete kit 960)

General information:

Target Pathogen	GLRaV-4 strain 6 (Grapevine leafroll-associated virus 4 strain 6 / Ampelovirus tetra virus strain 6)
Genus	<i>Ampelovirus</i>
Method	DAS-ELISA

Technical information:

Antibodies	Polyclonal (coat) and monoclonal (conjugate) antibodies developed against Chasselas clone 8/22 GLRaV-4 strain 6 isolate from grapevine.
Sampling	Leaf samples: 1:10 (w/v) in extraction buffer "Grapevine". Bark scrapings: 1:10 (w/v) in extraction buffer "Grapevine". Detection in mature leaves or scrapings from dormant canes are good sources for testing.
Controls	Negative control (NC): lyophilized extracts from healthy plants Positive control (PC): lyophilized GLRaV-4 strain 6 infected plant extracts
Working volume	200 µl / well

Host matrix:

Tested plant material	Leaf, bark (phloem) from dormant canes, vein
Tested species infected	<i>Vitis vinifera</i> (Grapevine)

Specificity:

Analytical Specificity	100%
Number of tested samples from target organism (True Positives)	11
Diagnostic Specificity	100%
Number of tested samples non-target organism (True Negatives)	33
Detected isolates / geographic regions (Inclusivity)	GLRaV-4 strain 6 #E555-FR (France, Grapevine) GLRaV-4 strain 6 240913 (Switzerland, Grapevine) GLRaV-4 strain 6 300914 (Switzerland, Grapevine) GLRaV-4 strain 6 280916 (Switzerland, Grapevine) GLRaV-4 strain 6 041017 (Switzerland, Grapevine) GLRaV-4 strain 6 211020 (Switzerland, Grapevine)
Cross reaction with (Exclusivity)	-
No cross reaction tested with (Exclusivity)	ASPV (Apple stem pitting virus) BCMV (Bean common mosaic virus) CGMMV (Cucumber green mottle mosaic virus) GCLV (Garlic common latent virus) GFkV (Grapevine fleck virus) GFLV (Grapevine fanleaf virus) GLRaV-2 (Grapevine leafroll-associated virus 2)

	GLRaV-3 (Grapevine leafroll-associated virus 3) GPGV (Grapevine pinot gris virus) MCMV (Maize chlorotic mottle virus) OYDV (Onion yellow dwarf virus) SLRSV (Strawberry latent ringspot virus) ToANV (Tomato apex necrosis virus) ToRSV (Tomato ringspot virus) TYLCV (Tomato yellow leaf curl virus)
No matrix effect observed with (Selectivity)	<i>Vitis vinifera</i> (Grapevine)

Sensitivity:

Diagnostic Sensitivity	100%
Analytical Sensitivity / LoD	10 ⁻² dilution of infected tissue (pathogen titer unknown).
Sensitivity on host matrix	GLRaV-4 strain 6 on grapevine leaves: 1:250 dilution GLRaV-4 strain 6 on veins of grapevine: 1:250 dilution Pathogen titer unknown
Other sensitivity characteristics	-

Validation:

Internal validation	1997
External validation	-
Reproducibility	100%
Repeatability	100%
Validation information	Internally, the reagents have been validated with the BIOREBA isolate collection, composed of various samples with diverse plant host range, collected within the last 40 years.

Validation release Date:
July 30th, 2026

QC manager:



Version: 1 – 30.07.2026.